pharmaceutical expenditure for patients with hypertension. **RESULTS:** Pharmaceutical expenditures increased with age and the duration of hypertension. A mixed effect model indicated that being widowed or separated significantly increased pharmaceutical expenditures by $219.12 (P<0.0001) and $206.84 (P<0.0001) respectively; the pharmaceutical expenditures decreases by $2.79 (P<0.01) if BMI decreased by 1 kg/m^2 from survey round 3 to round 5. Pharmaceutical expenditures decreased with family size and education level. Compared with the uninsured, those with public insurance spent $208.33 (P<0.0001) more, and those with private insurance spent $121.01 (P<0.0001)more on prescribed medicine for essential hypertension. **CONCLUSIONS:** Age, duration of hypertension, marriage status, BMI, type of insurance, and education were found as significant determinants of pharmaceutical expenditures for patients with hypertension.

PCV40

EVALUATING HEALTH CARE UTILIIZATION AND COSTS ASSOCIATED WITH BLOOD PRESSURE CONTROL IN PATIENTS WITH NEWLY TREATED HYPERTENSION

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OBJECTIVES: To investigate the association between blood pressure (BP) control and healthcare utilization and costs in newly treated patients with hypertension in a managed care organization. **METHODS:** Patients who met the selection criteria were identified from a healthcare organization during July 2005 – May 2008: 1) age ≥18; 2) ≥1 diagnosis of hypertension; 3) ≥1 prescription for hypertension; 4) continuously eligible with the organization 6 months before and 12 months after the initiation of the antihypertensive agent(s) (index date); and 5) ≥2 blood pressure (BP) readings with 1 at the index date, and another measured over 90 days of receiving medications. Patients were classified into BP at goal vsersus BP not at goal by the mean BP during 90 to 365 days after the index date. BP goal is defined as <140/90 mmHg for hypertensive patients without diabetes, and <130/80 mmHg for hypertensive patients with diabetes. Health care utilization and costs for the 12-month post index date were compared between groups. **RESULTS:** We identified 1056 patients, the mean age was 63 years old, and 54% were females. Overall, there were 61% of the patients with BP at goal and 36% of the patients with comorbid hypertension and diabetes met BP goal. The patients who met BP goal had higher number of outpatient visits (19.0 vs. 14.0; p<0.001), higher prescription fills (31.0 vs. 25.0; p<0.001), and higher total costs ($7016 vs. $4628; p<0.001) than those not at goal. **CONCLUSIONS:** To achieve BP goal, physicians would have to follow-up with patients frequently and emphasize the benefits of maintaining BP to goal. Although the economic benefits of BP control is not immediately seen in the first year treatment in this study, other studies have shown that long term control does prevent the complications of hypertension, and demonstrate the long term economic benefits. Additional research is warranted.

PCV41

ANALYSIS OF DIRECT COSTS ASSOCIATED WITH INR MONITORING AND WARFARIN DOSE AJUSTMENT IN PATIENTS WITH ATRIAL FIBRILLATION

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OBJECTIVES: To analyze the structure of expenses associated with warfarin dose adjustment and consequent international normalized ratio (INR) monitoring for effective stroke prevention in patients with atrial fibrillation. **METHODS:** The present study was designed as cost of illness analysis. Expenses associated with INR monitoring and warfarin dose adjustment were calculated for four different circumstances: 1) for obligatory medical insurance system according the current general tariff agreement; 2) for patients managed in outpatient department of University hospital using prices for consultations and coagulation tests; 3) for those controlling INR in commercial laboratory using their price list; and 4) for self-monitored patients using costs for coagulomether and test strips purchasing. **RESULTS:** Within the obligatory medical insurance system total expenses for warfarin management accounted for 4058 Roubles/person per year, but share of expenses for warfarin purchasing was less than 1 %; for patients treated in outpatient department of University clinic that estimated for 13019 Roubles/person per year and 0.03%; in the case of INR control in commercial laboratory – 18648 Roubles/person per year and 0.02%; and for self-moniroring – from 40,405 Roubles/person per year (0.01%) in the first year (that includes the fee for coagulomether purchasing) to 7405 Roubles/person per year (0.05%) in consequent years respectively. **CONCLUSIONS:** Regardless the strategy of INR control, concomitant expenses associated with warfarin dose adjustment and subsequent efficiency and safety monitoring is more than 100-fold higher than the price of warfarin itself.

PCV42

COST ANALYSIS OF VENOUS THROMBOEMBOLISM PROPHYLAXIS AFTER TOTAL KNEE REPLACEMENT AND TOTAL HIP REPLACEMENT

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OBJECTIVES: One of the major complications after major orthopedic surgery (OS) is Venous Thromboembolism (VTE). VTE is an important condition not only because of the potential long term complications to patients, but also the cost burden it brings to the society. Unfortunately, no data readily exists showing the cost of VTE prophylaxis (VTEp) in Turkey. Therefore, this study calculates the diagnosis and treatment costs of VTEp after major OS based on expert opinion. **METHODS:** Health Economists of BayerTürk created a survey to a)determine the resources utilized in diagnosis and treatment of Deep Vein Thrombosis (DVT) and Pulmonary Embolism (PE), b)establish the costs corresponding to potential complications of VTEp; intra cerebral hemorrhages (ICH) and gastrointestinal bleeds (GIB) The survey was completed by the pioneers in Orthopedics and Traumatology, cardiovascular diseases, hematology, gastroenterology, neurology and pulmonary diseases, based on daily clinical practice and guidelines. An Expert Panel preceded the completion of surveys, during which a consensus is reached. Based on the consensus, the costs of VTEp are calculated from payer's perspective. **RESULTS:** According to expert opinion, there are approximately 20,000-30,000 TKR, 25,000-30,000 THR surgeries are performed annually in Turkey. The major bleeding rates among these patients is approximately 1%, half of them being ICH and the other half being GIB. Ddiagnosis and treatment costs of VTEp and major bleeds calculated based on expert opinion are: a)Diagnosis cost of DVT (PE): TL 33 (48) for inpatients and TL 126 (150) for outpatients, b)Treatment cost of DVT (PE): TL 372 (1177) if hospitalization is required and TL 162 (757) if not, c)Diagnosis cost of ICH (GIB): TL 81 (192), d)Treatment cost of ICH (GIB): TL 682 (537). **CONCLUSIONS:** This study displays the importance of VTE prophylaxis. Diagnosis and treatment of VTE creates disease and cost burden to the public and the society.

PCV43

ECONOMIC BURDEN OF VENOUS THROMBOEMBOLISM IN ORTHOPEDIC SURGERY PATIENTS IN COLOMBIA

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OBJECTIVES: Orthopedic surgery presents a high risk of venous thromboembolism (VTE). Without prophylaxis, between 41% and 85% of patients who undergo high-risk orthopedic procedures develop deep vein thrombosis (DVT) and up to 10% develop pulmonary embolism (PE). Furthermore, the economic burden of VTE is perceived as substantially high in Colombia. Few data on the total economic burden of DVT and PE associated to orthopedic surgery, however, is available in the country. The objective of this study was to quantify the economic burden of DVT and PE in the Colombian health care setting. **METHODS:** Delphi Panel methodology was used to estimate 2011 resource utilization associated with VTE treatment events in patients undergoing hip and knee replacement. Delphi Panel contained specialists from the private Colombian setting. Local available databases and published literature was retrieved. Cost estimations (inpatient and outpatient costs, acquisition costs, bleedings costs, intracranial hemorrhages and other associated costs) considered the private perspective, using unit cost data from Seguro Obligatorio de Accidentes de Tránsito (SOAT). **RESULTS:** In Colombia the cost of hip replacement surgery (in 2011 USD) was estimated at USD $3182 and the cost of knee replacement at USD$2942. Mean symptomatic PE costs for inpatients with hip replacement was USD$6651 and DVT mean costs was USD$4061. Cost of treating minor bleeding adverse events in patients with hip replacement, was estimated as USD$4157 and major bleeding as USD$6171. The mean symptomatic PE costs (2011 US$) for inpatients with knee replacement was USD$6538 and DVT was USD $3801. Cost of treating minor bleeding adverse events in patients with knee replacement, was estimated as USD$3931 and major bleeding as USD$5945. **CONCLUSIONS:** The occurrence of VTE events related to orthopedic surgery can significantly impact overall costs of orthopedic surgery in Colombia.

PCV44

FINANCIAL IMPACT OF BLEEDING EVENTS ON TOTAL KNEE AND HIP REPLACEMENTS IN THE ARGENTINEAN HEALTH CARE SYSTEM

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OBJECTIVES: Deep vein thrombosis (DVT) and pulmonary embolism (PE) are clinical manifestations of VTE that can occur with or without symptoms. A major risk factor for VTE is orthopedic surgery. The economic burden of recurrent VTE associated to hip and knee replacement is perceived as considerable high within the Argentinean health care system; however, the data supporting this perception is scarce. The objective of this study is to document the health care resource utilization and costs associated with the care of VTEp and its complications related to hip and knee replacement in Argentina. **METHODS:** Data regarding health care resources associated with the treatment of VTE and major and minor bleeding was estimated using Delphi panel methodology in 2011 (specialists from public and private settings); locally available databases and published literature. Costs estimations (inpatient and outpatient costs, acquisition costs, bleedings costs, intracranial hemorrhages and other associated costs) considered a weighted average of three different perspectives: 1) private; 2) public health care system; and 3) social insurance. Costs are reported in 2011 USD. **RESULTS:** The estimated mean cost -if events occur while hip replacement inpatient surgery- of treating symptomatic PE is approximately USD$4510 while the cost of DVT was estimated in USD $2904. Cost